09/896,187   MS164185.01/MSFTP215US

AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions of claims in the application:

Listing of Claims:

1.   (Previously Presented) A system for inferring an information goal, comprising:

a query subsystem that receives at least one of a query and an extrinsic data, the query subsystem is operatively coupled to an inference model and a knowledge data store, the query subsystem comprising:

a natural language processor that parses the query; and

an inference engine that infers one or more informational goals based, at least in part, on at least one of the query, the extrinsic data and an inference data stored in the inference model, the inference engine further inferring one or more preferred levels of detail for an answer based at least on one of an inferred age of a user, a physical location of a user, and an application being employed by the user.

2.   (Previously Presented) The system of claim 1, the informational goals include at least one of, a type of information requested in the query, a topic of the query, and a focal point of the query.

3.   (Previously Presented) The system of claim 2 comprising:

an input query log that stores at least one of, one or more queries and one or more pieces of extrinsic data; and

a learning system operatively coupled to the input query log, the learning system operable to produce the inference model.

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4.   (Previously Presented) The system of claim 3, where the learning system comprises:

the natural language processor further produces linguistic data concerning one or more linguistic features;

a tagging tool that facilitates manipulating the linguistic data;

one or more taggers that manipulates the linguistic data; and

wherein the inference model stores information concerning conditional probabilities associated with the likelihood that one or more informational goals exist, where the conditional probabilities of the informational goals are determined, at least in part, from Bayesian statistical analysis performed on the linguistic data.

5.   (Previously Presented) The system of claim 4, the linguistic data comprises a parse tree, where the parse tree contains extractable information concerning the nature of and relationships between observable linguistic features.

6.   (Previously Presented) The system of claim 5, the observable linguistic features in the extractable information comprise word-based features, structural features and hybrid linguistic features.

7.   (Previously Presented) The system of claim 6, the word-based features indicate the presence of one or more candidate terms that can be employed in predicting an informational goal.

8.   (Previously Presented) The system of claim 4, the taggers manipulate the linguistic data to conform with one or more schemas associated with reasoning concerning the relevance of a part of a query based on one or more language models.

9.   (Previously Presented) The system of claim 8, the taggers supervise learning associated with computing probabilities associated with the informational goals.

10.   (Previously Presented) The system of claim 4, the inference model represents a probabilistic dependency model.

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11.   (Previously Presented) The system of claim 4, the inference model comprises one or more decision trees, the decision trees store conditional probabilities associated with one or more informational goals, the decision trees being traversable by the linguistic data.

12.   (Previously Presented) The system of claim 3, the input query log is at least one of a data store and a manual store.

13.   (Previously Presented) The system of claim 3, the natural language processor parses a query into one or more parts suitable for retrieving one or more conditional probabilities stored in the inference model.

14.   (Previously Presented) The system of claim 13, the one or more parts comprise at least one of, logical forms, adjectival phrases, adverbial phrases, noun phrases, verb phrases, prepositional phrases and parse trees.

15.   (Previously Presented) The system of claim 14, the inference engine further infers one or more informational goals based, at least in part, on at least one of the query, the extrinsic data, the one or more parts, and the one or more conditional probabilities stored in the inference model.

16.   (Previously Presented) The system of claim 3, the query subsystem further comprising:
        an answer generator that produces a response to the query and produces an error message.

17-19. (Cancelled)

20.   (Previously Presented) The system of claim 1, the knowledge data store is searchable for information responsive to a new query and where the information retrieved will depend, at least in part, on the inferred informational goals.

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21.   (Previously Presented) The system of claim 1 the query subsystem is compiled into an executable, and where the executable accepts as input one or more query distinctions.

22-28. (Cancelled)

29.   (Previously Presented) A computer readable medium storing computer executable components of a system for inferring an information goal, the system comprising:

a query component that receives a new query and a new extrinsic data, the query component operatively coupled to an inference model and a knowledge data store, the query component comprising:

a natural language processing component that parses the new query; and

an inference component that infers one or more informational goals based, at least in part, on at least one of, the new query, the new extrinsic data and an inference data stored in the inference model, the inference engine further inferring one or more preferred levels of detail for an answer based at least on one of an inferred age of a user, a physical location of a user, and an application being employed by the user.

30-54. (Cancelled)

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55.   (Previously Presented) A computer readable medium storing computer executable components of a system for learning how to infer information goals from queries, the system comprising:

a natural language processing component that produces a linguistic data concerning one or more linguistic features;

a tagging component that manipulates the linguistic data;

one or more taggers that manipulates the linguistic data; and

an inference model component that stores information concerning conditional probabilities associated with the likelihood that one or more informational goals exist, where the conditional probabilities of the informational goals are determined, at least in part, from Bayesian statistical analysis performed on the linguistic data, the inference engine further inferring one or more preferred levels of detail for an answer based at least on one of an inferred age of a user, a physical location of a user, and an application being employed by the user.

56.   (Cancelled)

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